

I claim:

1. A pedal shaft structure of a bicycle having a second pedaling function, said bicycle having a shaft tube with a braking unit and a shaft, a crank being arranged at each end of said shaft, a pedal being arranged at the other end of
5 each of said crank, said shaft comprising;

a main shaft comprising a first shaft with a guide bar, a second shaft with a wedge body, a first bushing with a wedge body and a guide groove, and a first spring, said first bushing being telescoped between said first shaft and said second shaft, said guide bar being embedded in said guide groove, said first
10 spring being telescoped at said first shaft and elastically retained between said first bushing and said first shaft, said two wedge bodies being meshed together;

a second spring telescoped at said main shaft, one end of said second spring being fixed at said second shaft; and

a pair of bearings arranged at two ends of said shaft tube and telescoped at
15 two ends of said main shaft, respectively;

said braking unit comprising an insertion hole formed at said shaft tube, an insertion rod inserted into said insertion hole, a steering component, a steel rope connected between said steering component and said insertion rod, said insertion rod being further inserted into the other end of said second spring for
20 fixation after inserted into said insertion hole.

2. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein both said wedge body of said second shaft and said wedge body of said first bushing comprise two wedge-shaped protuberances and two wedge-shaped recessed bodies and are meshed

together.

3. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein said shaft further comprises a second bushing telescoped at said main shaft, a recessed portion is arranged on said second bushing, said recessed portion has a through hole corresponding to said insertion rod, and the other end of said second spring has a ring body embedded in said recessed portion.
4. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 3, wherein a height of said recessed portion of said second bushing is greater than a thickness of said ring body of said second spring.
5. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein said main shaft further comprises a screw nut and a screw, said first and second shafts of said main shaft have hollow receiving rooms, said screw nut and said screw are received in said receiving rooms of said first and second shafts, and said screw penetrates into said receiving room of said first shaft to be screwed into said screw nut.
6. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein said shaft further comprises a buffer located between said bearing and said second shaft.
7. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein said braking unit further comprises a clip ring and an elastic component, said clip ring is clamped to said bicycle to position said steel rope, and said elastic component telescopes on said steel rope and is elastically retained between said clip ring and said insertion rod.

8. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein one end of said steel rope further has a block body, a cavity is arranged at one end of said insertion rod, and said block body of said steel rope is embedded in said cavity of said insertion rod.
- 5 9. The pedal shaft structure of a bicycle having a second pedaling function as claimed in claim 1, wherein said braking unit further comprises a base portion formed at said shaft tube and a hollow insertion rod bushing, said base portion has said insertion hole having an inner thread and connected to said shaft tube, and said insertion rod bushing having an outer thread is
- 10 screwed into said insertion hole of said base portion.